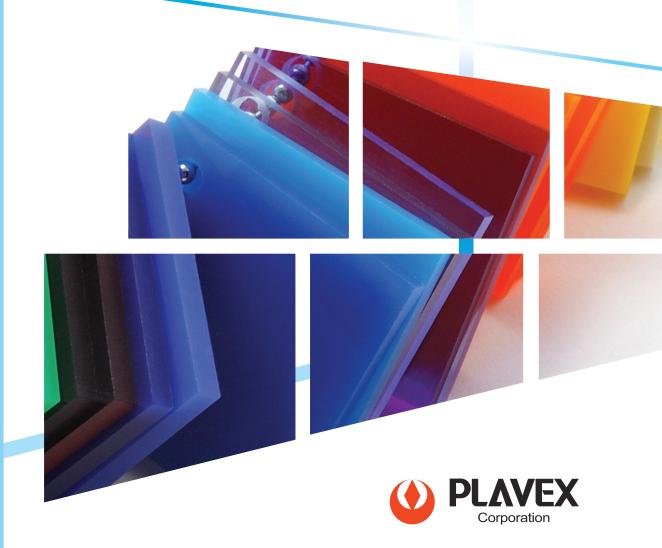
PLAVEX

Supplier of high quality and eco-friendly acrylic sheet



About **PLAVEX**

PLAVEX Corporation was founded in 2004 and is specialized in the extrusion of high quality plastic sheets. A drive for innovation, entrepreneurship and open communication are core values that made Plavex grow into one of the market leaders in its sector. High quality products are the result of thoughtful quality standards and sophisticated procedure. Our company is therefore ISO 9001 certified since 2012.

R&D

Continuous investment in high-tech extrusion plants and the ongoing research and developments have brought us the possibility to supply our customers with high quality and competitive products.



Facilities & Technology

We have a plant in Eumseong-gun with more than 40,000 square meter in covered surface area, perfectly conditioned to carry out extrusion and another series of complementary processes.



Staff

At PLAVEX, we value our staff and their know-how as an essential part of our competitive edge.



Internationalisation

Plavex supplies high quality plastic sheets to five continents. Plavex will strive to provide new customer value in more countries.



What makes Arystal® special?

Arystal® is a brand of Plavex that aims to create beautiful, safe and convenient world with a high quality and eco-friendly PMMA panel that has the luxury and elegance of crystal and the clarity and transparency of glass.

Quality control

As Plavex applies strict quality standards for producing LGP to all products, **Arystal**® has uniform thickness and ultimate clarity.



High transparency

With a light transmittance of 92%, **Arystal**® acrylic sheet offers a superior transparency quality compare to traditional glass.



Excellent weatherability

In extreme temperatures, aggressive sunlight and in high winds and heavy rain, **Arystal**® acrylic sheet retains its superior performance qualities.



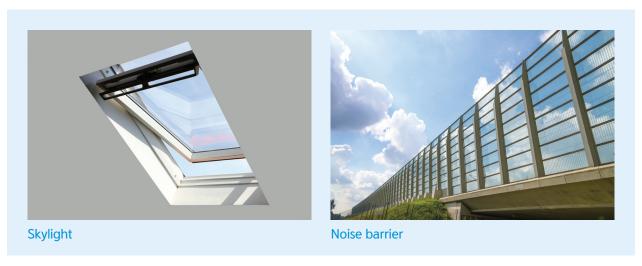
Easy to fabricate

Arystal® is light, safe and easy to fabricate. So, it is used in more applications than glass.



Arystal® EX

Arystal® EX is an extruded acrylic sheet produced by extrusion using PMMA(PolyMethylMethAcrylate), a thermoplastic resin, as the main raw material. Arystal® EX is suitable for various processing due to its low thickness variation in addition to the high transparency, weather resistance and lightness characteristic of acrylic.



MAIN ADVANTAGES

- Transparency and weather resistance It has better light transmittance than glass and maintains transparency even when exposed to direct sunlight for a long time
- · Light weight and high strength Lighter than glass and excellent impact resistance
- · Smoothness The surface is beautiful and there is little variation in thickness
- Easy to fabricate Very suitable for laser and CNC machining, adhesion, vacuum forming, air pressure forming, thermoforming and other forming methods
- **Eco-friendly** It is harmless to the human body, does not generate toxic gas during combustion and is 100% recyclable
- · Safety When it is broken, it is safe because fragments do not scatter

APPLICATION

- · Advertising Display, signage, exhibition booth and etc
- · Fabricated items Stationery, cases and etc
- · Architecture and interior Acoustic barriers, canopies, partitions, furniture and etc
- · Industry Machine cover and etc

COLOR

· Clear, White, Black and customized color

Arystal® OPTIC

Arystal® OPTIC is an acrylic sheet absorbs light from lamps(LED/CCFL) and it disperses the lights uniformly on acrylic sheet through patterns. Arystal® OPTIC is known as the best quality acrylic sheet and mostly used for Light Guide Panel.



MAIN ADVANTAGES

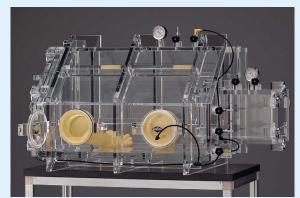
- **Optical Characteristics** It distributes the light input into the acrylic over the entire board with uniform brightness. It is a transparent material that considers the optical properties used in electronic products
- Transmission Transparent and high visible light transmittance
- · Smoothness Excellent luminance, uniformity and very low thickness deviation

- **Light Guide Panel** Used as a BLU (Back Light Panel) for high–quality electronic products such as LED TV, computer or laptop monitor and medical equipment monitor
- · **Lighting** Lighting fixtures, photo frames for advertising and etc

Arystal® CA

Arystal® CA is a coated acrylic sheet with excellent mechanical properties and transparency. It is manufactured by applying coating solution to the extruded acrylic sheet.





Acrylic furniture

Machine cover

MAIN ADVANTAGES

- **High transparency** Transparent and high visible light transmittance
- Excellent smoothness Suitable for printing and coating due to its beautiful surface

- · Antistatic coated sheet Where antistatic measures are required, such as semiconductor-related devices, medical devices and clean rooms
- · Hard coated sheet Things need to protect the surface from scratches like display cases, billboards, frame covers and etc
- · Antibacterial coated sheet A place to inhibit the growth of bacteria

Arystal® LIGHTING

It is an acrylic sheet with a light diffusing function added to a normal acrylic sheet. Matt diffusing sheet of Arystal® LIGHTING has higher illuminance because a pattern is applied on one side.



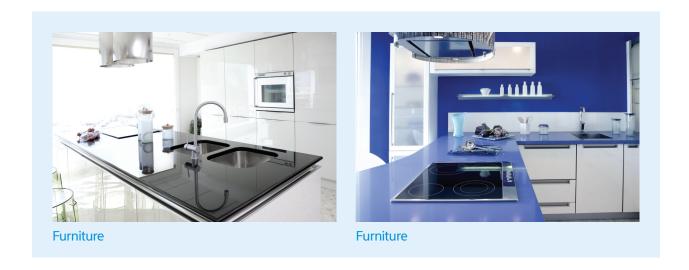
MAIN ADVANTAGES

- Illuminance Used as a cover for various lighting lamps such as LED lamps, fluorescent lamps, incandescent lamps, halogen lamps, etc, and the unique light characteristics are well expressed
- **Weather resistance** There is no change in illuminance even when exposed to external direct sunlight for a long time and there is little yellowing
- **Formability** Excellent formability such as vacuum forming, air pressure forming, and thermoforming, and there is no change in roughness even after forming

- · Lighting Various light covers, lighting interiors
- · Advertisement Signboards(cast signboard, channel signboard and etc)

Arystal® Co-EX

Arystal® Co-EX is an acrylic sheet featuring a luxurious color luster by co-extrusion with two layers of transparent & specific color. Arystal® Co-EX is more resistant to scratches than color painted products, and it is economical by reducing several processing steps.



MAIN ADVANTAGES

- · High gloss Express luxurious color
- · Thickness deviation Uniform thickness
- · Easy to fabricate Adhesive and thermoforming
- · Weather resistance and chemical resistance

- · Architecture and interior Point finishing materials, art wall, wall decoration
- · Furniture
- · Advertising Advanced signage, information, P.O.P., display and etc

Arystal® ECO

Arystal® ECO is an extruded acrylic sheet with excellent transparency, impact and weather resistance. It is made from 100% recycled raw material (PMMA) and can be recycled over and over again. And Arystal® ECO is widely used as replacement of glass with its lightweight and unbreakable characteristic.



MAIN ADVANTAGES

- Transparency and weather resistance It has better light transmittance than glass and maintains transparency even when exposed to direct sunlight for a long time
- · Light weight and high strength Lighter than glass and excellent impact resistance
- · Smoothness The surface is beautiful and there is little variation in thickness
- Easy to fabricate Very suitable for laser and CNC machining, adhesion, vacuum forming, air pressure forming, thermoforming, and other forming methods
- **Eco-friendly** It is harmless to the human body, does not generate toxic gas during combustion, and is 100% recyclable
- · Safety When broken, it is safe because fragments do not scatter

- · Advertising Display, signage, exhibition booth and etc
- · Architecture and interior Acoustic barriers, canopies, partitions, furniture and etc
- · Fabricated items Stationery, cases and etc
- · Industry Machine cover and etc

Typical Properties

ltem	Unit	Method	Value
Density	g/cm³	ISO 1183	1.19
Refractive index	-	ISO 489	1.49
Light transmittance	%	ISO 13468-1	92↑
Haze	%	ISO 14782	1↓
Tensile strength	MPa	ISO 527-2	74
Elongation	%	ISO 527-2	5.5
Flexural strength	MPa	ISO 178	120
Flexural modulus	Gpa	ISO 178	3.2
Charpy impact strength (Notched)	KJ/m²	ISO 179-2	1.5
Izod impact strength (Notched)	KJ/m²	ASTM D256	1.8
Rockwell hardness (M Scale)	M scale	ISO 2039	98
Heat deflection temperature (1.8MPa)	°C	ISO 75	98
Vicat softening temperature	℃	ISO 306	105
Water absorption (24hr)	%	% ASTM D570 0.3	
Coefficient of linear expansion	1/℃	ASTM D696	6 x 10 ⁻⁵

^{*}Data given are average values and should not be used for specification purpose.

Product range

Brand	Product	Description	Thickness
Arystal® -	EX	General acrylic sheet	1~20mm
	OPTIC	Normal and lenticular light guide plate	2~10mm
	CA	Coated acrylic sheet	2.5~20mm
	LIGHTING	Light diffusing acrylic sheet	2~4mm
	Co-EX	Co-extruded acrylic sheet	2.5~10mm
	ECO	Recycled acrylic sheet	1~20mm

Our capability

- · Thickness 0.8~20mm
- Width From 900mm to 2100mm
 *Max. width can be different according to the thickness
- · Color Clear, black, white and customized color



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